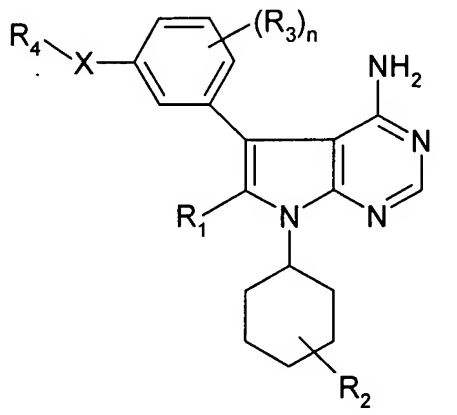
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A compound of formula I



(I),

wherein

n is from 0 to 4,

R_1 is hydrogen, unsubstituted or substituted lower alkyl or halogen,

R_2 is hydroxy; unsubstituted, mono- or disubstituted amino; an optionally substituted heterocyclic radical containing at least one nitrogen ring atom and being attached to the cyclohexane ring of the molecule of formula I via a nitrogen ring atom; a radical R_5-(C=Y)-NH-, wherein R_5 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino, a heterocyclic radical, or etherified hydroxy, and Y is oxygen, sulfur or imino; or a radical R_6-sulfonylamino, wherein R_6 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino or phenyl optionally substituted by lower alkyl, lower alkoxy or nitro,

R_3 is lower alkyl, hydroxy-, amino- or halogen-substituted lower alkyl, hydroxy, cyano, lower alkoxy, lower alkanoyl, lower alkanoyloxy, amino, mono- or di-lower alkylamino, lower alkanoylamino, carboxy, lower alkoxycarbonyl or halogen, wherein the R_3 substituents can be selected independently of one another if n>1,

R_4 is a radical R_7-$CR_8(R_9)$-, wherein R_7 is cyclobutyl, cyclopentyl, cyclohexyl, phenyl, furyl, pyrrolyl, thienyl or pyridyl, said R_7 substitutents being optionally substituted by one or more radicals selected from lower alkyl and halogen, and R_8 and R_9 are independently of each other hydrogen, lower alkyl or halogen, and

X is selected from -O-, -NH- and -S-,

or a salt thereof.

2. (Currently Amended) A compound of formula I according to claim 1, wherein
n is from 0 to 4,
R_1 is hydrogen, unsubstituted or substituted lower alkyl or halogen,
R_2 is hydroxy; unsubstituted, mono- or disubstituted amino; an optionally substituted heterocyclic radical containing at least one nitrogen ring atom and being attached to the cyclohexane ring of the molecule of formula I via a nitrogen ring atom; a radical R_5-(C=Y)-NH-, wherein R_5 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino, a heterocyclic radical, or etherified hydroxy, and Y is oxygen, sulfur or imino; or a radical R_6-sulfonylamino, wherein R_6 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino or phenyl optionally substituted by lower alkyl, lower alkoxy or nitro,
R_3 is lower alkyl or lower alkoxy, wherein the R_3 substituents can be selected independently of one another if n>1,
R_4 is a radical R_7-$CR_8(R_9)$-, wherein R_7 is cyclobutyl, cyclopentyl, cyclohexyl, phenyl, furyl, pyrrolyl, thienyl, pyridyl or phenyl substituted by one or more radicals selected from lower alkyl and halogen, and R_8 and R_9 are independently of each other hydrogen, lower alkyl or halogen, and
X is selected from -O-, -NH- and -S-,
or a salt thereof.

3. (Currently Amended) A compound of formula I according to claim 1, wherein is 0,
R_1 is hydrogen, unsubstituted or substituted lower alkyl or halogen,
R_2 is hydroxy; unsubstituted, mono- or disubstituted amino; an optionally substituted heterocyclic radical containing at least one nitrogen ring atom and being attached to the cyclohexane ring of the molecule of formula I via a nitrogen ring atom; a radical R_5-(C=Y)-NH-, wherein R_5 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino, a heterocyclic radical, or etherified hydroxy, and Y is oxygen, sulfur or imino; or a radical R_6-sulfonylamino, wherein R_6 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino or phenyl optionally substituted by lower alkyl, lower alkoxy or nitro,
R_4 is benzyl, and
X is selected from -O-, -NH- and -S-,
or a salt thereof.

4. (Currently Amended) A compound of formula I according to claim 1, wherein
n is 0,
R_1 is hydrogen, unsubstituted or substituted lower alkyl or halogen,

R_2 is hydroxy; unsubstituted, mono- or disubstituted amino; an optionally substituted heterocyclic radical having from 4 to 8 ring members and from 1 to 3 heteroatoms whereby at least one heteroatom is nitrogen and the binding of the heterocyclic radical to the cyclohexane ring of the molecule of formula I occurs via a nitrogen ring atom; a radical R_5-(C=Y)-NH-, wherein R_5 is lower alkyl, unsubstituted, mono- or disubstituted amino, etherified hydroxy, a heterocyclic radical having from 4 to 8 ring members and from 1 to 3 heteroatoms whereby at least one heteroatom is nitrogen and the binding of the heterocyclic radical occurs via a nitrogen ring atom, lower alkyl substituted by said heterocyclic radical or by one or more radicals selected independently of one another from the group consisting of amino, N-lower alkylamino, N,N-di-lower alkylamino, N-lower alkanoylamino, N,N-di-lower alkanoylamino, hydroxy, lower alkoxy, lower alkoxy-lower alkoxy, lower alkanoyl, lower alkanoyloxy, cyano, nitro, carboxy, lower alkoxycarbonyl, carbamoyl, amidino, guanidino, ureido, mercapto, lower alkylthio and halogen, and Y is oxygen, sulfur or imino; or a radical R_6-sulfonylamino, wherein R_6 is unsubstituted or substituted lower alkyl, unsubstituted, mono- or disubstituted amino or phenyl optionally substituted by lower alkyl, lower alkoxy or nitro,
R_4 is benzyl, and
X is selected from -O-, -NH- and -S-,
or a salt thereof.

5. (Currently Amended) A compound of formula I according to claim 1, wherein
n is 0,
R_1 is hydrogen, lower alkyl or halogen,
R_2 is hydroxy; unsubstituted, mono- or disubstituted amino; an optionally substituted heterocyclic radical having from 4 to 8 ring members and from 1 to 3 heteroatoms whereby at least one heteroatom is nitrogen and the binding of the heterocyclic radical to the cyclohexane ring of the molecule of formula I occurs via a nitrogen ring atom; a radical R_5-(C=Y)-NH-, wherein R_5 is lower alkyl, unsubstituted or monosubstituted amino, etherified hydroxy, or lower alkyl substituted by a heterocyclic radical having from 4 to 8 ring members and from 1 to 3 heteroatoms whereby at least one heteroatom is nitrogen and the binding of the heterocyclic radical occurs via a nitrogen ring atom, and Y is oxygen or imino; or a radical R_6-sulfonylamino, wherein R_6 is lower alkyl or disubstituted amino,
R_4 is benzyl, and
X is selected from -O-, -NH- and -S-,
or a salt thereof.

6. (Original) A compound of formula I according to claim 1, wherein
n is 0,

R_1 is hydrogen, lower alkyl or halogen,
R_2 is hydroxy, amino, N,N-di-lower alkylamino, pyrimidinyl-amino, 1,4,5,6-tetrahydro-pyrimidinyl-amino, 4,5-dihydro-1H-imidazolyl-amino, azetidin-1-yl, pyrrolidin-1-yl, 1-piperidyl, lower alkyl-piperazin-1-yl, morpholin-4-yl, thiomorpholin-4-yl; a radical R_5-(C=Y)-NH-, wherein R_5 is lower alkyl, lower alkoxy, amino, N-lower alkylamino, N-(phenyl-lower alkyl)-amino, N-(lower alkyl-phenyl-lower alkyl)-amino, N-(lower alkoxy-phenyl-lower alkyl)-amino, N-(morpholin-4-yl-lower alkyl)-amino, N-(N',N'-di-lower alkylamino-lower alkyl)-amino, lower alkoxy-lower alkoxy, 1-piperidyl-lower alkyl, morpholin-4-yl-lower alkyl or lower alkyl-piperazin-1-yl-lower alkyl, and Y is oxygen or imino; or a radical R_6-sulfonylamino, wherein R_6 is lower alkyl or N,N-di-lower alkylamino,
R_4 is benzyl, and
X is -O-,
or a salt thereof.

7. (Original) A compound of formula I according to claim 1, selected from the group consisting of
cis-4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexanol;
trans-4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexanol;
cis-5-(3-benzyloxy-phenyl)-7-(4-piperidin-1-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-7-(4-piperidin-1-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
cis-5-(3-benzyloxy-phenyl)-7-(4-pyrrolidin-1-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-7-(4-pyrrolidin-1-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
cis-5-(3-benzyloxy-phenyl)-7-[4-(4-methyl-piperazin-1-yl)-cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-7-[4-(4-methyl-piperazin-1-yl)-cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
cis-5-(3-benzyloxy-phenyl)-7-(4-morpholin-4-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-7-(4-morpholin-4-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
cis-7-(4-azetidin-1-yl-cyclohexyl)-5-(3-benzyloxy-phenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-7-(4-azetidin-1-yl-cyclohexyl)-5-(3-benzyloxy-phenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

cis-5-(3-benzyloxy-phenyl)-7-(4-thiomorpholin-4-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

trans-5-(3-benzyloxy-phenyl)-7-(4-thiomorpholin-4-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

trans-5-(3-benzyloxy-phenyl)-7-(4-diethylamino-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

cis-7-(4-amino-cyclohexyl)-5-(3-benzyloxy-phenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

trans-7-(4-amino-cyclohexyl)-5-(3-benzyloxy-phenyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

cis-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-carbamic acid methyl ester;

cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-methyl-urea;

cis-N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-2-piperidin-1-yl-acetamide;

cis-N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-2-morpholin-4-yl-acetamide;

cis-N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-2-(4-methyl-piperazin-1-yl)-acetamide;

cis-5-(3-benzyloxy-phenyl)-7-[4-(pyrimidin-2-ylamino)-cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

cis-5-(3-benzyloxy-phenyl)-7-[4-(1,4,5,6-tetrahydro-pyrimidin-2-ylamino)-cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

cis-5-(3-benzyloxy-phenyl)-7-[4-(4,5-dihydro-1H-imidazol-2-ylamino)-cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

cis-N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-methanesulfonamide;

cis-N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-N,N-dimethylaminosulfonamide;

cis-5-(3-benzyloxy-phenyl)-7-(4-dimethylamino-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;

N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-acetamide;

cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-ethyl-urea;

cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-isopropyl-urea;

cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-propyl-urea;

cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-butyl-urea;

cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-(3-methyl-benzyl)-urea;
cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-benzyl-urea;
cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-(4-methoxy-benzyl)-urea;
cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-tert-butyl-urea;
cis- N-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-guanidine;
cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-(2-dimethylamino-ethyl)-urea;
cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-(2-morpholin-4-yl-ethyl)-urea;
cis-1-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-3-(3-morpholin-4-yl-propyl)-urea;
cis-{4-[4-amino-5-(3-benzyloxy-phenyl)-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexyl}-carbamic acid 2-methoxy-ethyl ester;
cis-4-[4-amino-5-(3-benzyloxy-phenyl)-6-bromo-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexanol;
trans-4-[4-amino-5-(3-benzyloxy-phenyl)-6-bromo-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexanol;
cis-4-[4-amino-5-(3-benzyloxy-phenyl)-6-methyl-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexanol;
trans-4-[4-amino-5-(3-benzyloxy-phenyl)-6-methyl-pyrrolo[2,3-d]pyrimidin-7-yl]-cyclohexanol;
trans-5-(3-benzyloxy-phenyl)-6-methyl-7-[4-(4-methyl-piperazin-1-yl)-cyclohexyl]-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-7-(4-dimethylamino-cyclohexyl)-6-methyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-7-(4-diethylamino-cyclohexyl)-6-methyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-6-methyl-7-(4-pyrrolidin-1-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-5-(3-benzyloxy-phenyl)-6-methyl-7-(4-morpholin-4-yl-cyclohexyl)-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
trans-7-(4-azetidin-1-yl-cyclohexyl)-5-(3-benzyloxy-phenyl)-6-methyl-7H-pyrrolo[2,3-d]pyrimidin-4-ylamine;
and pharmaceutically acceptable salts thereof.

8. (Cancelled) ~~A compound of formula I, or a pharmaceutically acceptable salt thereof, according to claim 1 for use in a method for the treatment of the human or animal body.~~

9. (Previously Presented) A pharmaceutical composition comprising a compound of formula I or a pharmaceutically acceptable salt thereof according to claim 1, together with at least one pharmaceutically acceptable carrier.

10.-12. (Cancelled)